DWR Gas Procurement Summary

Natural gas prices were relatively stable during the 1990s, generally ranging between $2 and $3/mmbtu. In July 2000, there were sudden and large spikes in prices accompanied with a significant increase in gas market volatility. Prices skyrocketed at supply basin locations, trading points and at Topock, Arizona, where gas produced in the Southwest enters the State. The price volatility was attributed to demand, insufficient pipeline capacity and lack of underground storage in California.

The cost of natural gas is the most significant component in the cost of generating electricity. Generators selling electricity on fuel pass-through agreements initially had little incentive to minimize their fuel costs, and passed them on directly to the generators. Absent state action to manage these costs there was significant risk that they would have been much higher.

California's production of natural gas accounts for about 15 percent of statewide use. The remainder comes from locations ranging from Canada to the Southwest. Gas from these fields is channeled into five major interstate pipelines. Within California, pipelines owned by the Investor Owned Utilities (IOUs) form a much more limited distribution network.

Much of the large price difference that existed between the producing regions and California was attributed to a weakness in interstate pipeline capacity. Interstate pipeline projects are now being pursued, but they will make no significant impact on supply until the year 2002 and beyond.

Natural gas storage also plays an important part in balancing supply and demand, especially during times of peak demand. Many electric generator supply contracts, with natural gas pass-through agreements, provide use of generating facilities for a certain number of hours each year.

To maintain the dispatch flexibility that allows DWR to maximize the value of the contracted generation, gas storage capability must be available. Storage is used to take advantage of short-term gas supply opportunities, electric market needs and imbalance penalty avoidance. Improvements in this area are now underway through expansion at existing storage facilities.

The State's energy problems forced Governor Gray Davis to proclaim a State of Emergency on February 17, 2001. Shortly thereafter, the DWR began to purchase and sell the electric power necessary to mitigate the effects of that emergency. AB X1 1 provided the legislative authority to do so.

As part of the overall Resources Power Supply Program developed by the DWR, a Fuel Management program was put in place. This provided an operational framework that enabled the department to exercise fuel purchase options contained in selected power contracts that were entered into as a result of the governor's action.

Stated another way, the primary purpose of the DWR program is to minimize fuel costs by purchasing gas in forward contracts and relying less on volatile spot market purchases.

By minimizing monthly variations in power purchase costs and imposing a discipline in the markets, the gas purchase strategy adopted by DWR has reduced the department's exposure to escalating and unmanaged fuel costs.

The State Assembly codified the department's responsibility in ABX 1 1. Section 80100 of that bill requires the department to "achieve an overall portfolio of contracts

for energy resulting in reliable service at the lowest possible price per kilowatt hour." The bill also authorized the department to "enter into options or forward contracts…for transmission, scheduling, and other power related services necessary or desirable" to fulfill that responsibility.

The California Attorney General's Office reviewed ABX1 1 and determined that the DWR had the legal authority to purchase fuel gas for generation of electricity for its electrical supply contracts.

In response to this awarding and confirmation of authority, DWR has implemented a fuel strategy that avoids over-reliance on the daily spot market to meet peaking supply needs. The strategy is centered around the use of a balanced fuel portfolio that provides the flexibility to respond to changing market conditions, and DWR gas requirements on a total, baseload and peaking basis.

Active management of a balanced portfolio of tools gives DWR the opportunity to achieve costs lower than what the generators might otherwise charge. The exact portfolio contents depend on opportunities in a market that changes daily. Elements in the portfolio include intrastate transportation, gas storage capacity, and a percentage of day market, short term and longer-term purchases.

Assembling a balanced portfolio, under any circumstance, is a delicate and time-sensitive operation. Exact portfolio content depends upon opportunities available in the market on a day-by-day basis. Price offers in the natural gas industry are frequently open for no more than 24 to 48 hours, while other transactions such as fixed-price offers may be open for less than one hour.

To operate effectively in this arena, DWR has signed contracts for natural gas purchases and related services. Following the standard industry practice, the department has put "enabling agreements" in place with several suppliers and uses "transaction confirmations" to make individual purchases when they are deemed cost-effective.

DWR has entered into agreements with major gas suppliers. Purchases are made monthly under these agreements.

This is significant because about half of all of the electricity generating contracts entered into for energy production allow the State to choose the gas supply for generators, if it feels it can provide natural gas at a lower cost than the supplier.

When managing the gas power supplies, the portfolio approach allows DWR to reduce costs by making purchases from multiple suppliers, using financial instruments such as hedges and swaps to reduce risk, and directly acquiring transportation and storage.

There is no increased risk in this approach, as DWR has implemented a series of risk management guidelines that are followed closely by a capable internal staff, supported by a number of knowledgeable and experienced outside consultants.

However, to satisfy the needs of the bond market for financing, the DWR has developed a full procurement program and must comply with market credit and document requirement. In doing so, the department must operate as any other market participant.

Accordingly, the DWR has authority to purchase and sell gas, procure gas transportation and storage, and provide assurances in the form of margin agreements, performance bonds and guarantees.

The balanced portfolio approach that allows the state to purchase natural gas at the best price available, while operating in the market, is more necessary than ever as gas and power prices become more closely linked in today's economy.